

STREMLINA, S.M.; SHIBAYEV, A.N., red.

[Hygiene of nutrition; materials to assist instructors in courses on the minimal sanitary knowledge for public food service workers] Gigiena pitaniiia; materialy v po-moshch' prepodavateliam kursov po sanitarnomu minimumu dlja rabotnikov obshchestvennogo pitaniiia. Moskva, In-t sanitarnogo prosvetshcheniya, 1963. 55 p. (MIRA 17:9)

PROKOF'YEV, Vasiliy Platonovich; SUPONITSKIY, M.Ya., dots., kand.
med. nauk, retsenzent; STREMLINA, S.M., retsenzent; MEDOKS,
T.S., retsenzent; VUL'FOVICH, V.O., spets. red.; RAUBE, P.V.,
inzh., spets. red.; FUKS, V.K., red.

[Industrial sanitation in food industry enterprises] Proiz-
vodstvennaia sanitariia na predpriatiiakh pishchevoi pro-
myshlennosti. Moskva, Pishchevaiia promyshlennost', 1964.
(MIRA 18:3)
295 p.

ACC NR: AP0036007

SOURCE CODE: UR/0240/66/000/011/0066/0068

AUTHOR: Stremlina, S. M. (Moscow); Mirochnik, F. M. (Moscow)

ORG: none

TITLE: Organization of sanitation, sanitation statistics, and training of sanitation personnel. Experience of the Food Hygiene Section of the Moscow City Sanitation-Epidemiological Station

SOURCE: Gigiiena i sanitariya, no. 11, 1966, 66-68

TOPIC TAGS: sanitation, food sanitation, food technology

ABSTRACT: Various Moscow departments dealing with food sanitation are united under the supervision of Gossaninspeksiya (state sanitation inspection agency) which operates through sanitation-epidemiological stations. The centralized management has produced tighter control of food production hygiene, introduced more prophylactic measures, use of synthetic materials, better knowledge of modern food technology, such as new forms of packing, the use of pesticides, proper use of fat in food preparation, etc. The unified control of managing the sanitary problems, headed by experts in the field was found highly satisfactory in developing the essential attitude toward hygienic handling of food production and proper inspection.

SUB CODE: 06/ SUBM DATE: 01Apr66

Card 1/1 UDC: 613.2:614.3/.4.07(470.311)

STREMOUKHOV, L., gornyy master remontno-podgotovitel'noy smeny.

In a multiple purpose brigade. Mast.ugl.6 no.3:5-6 Mr '57.
(MLRA 10:4)
(Donets Basin--Coal mines and mining)

STREMOUSOV, V. I.

Dissertation: "An Investigation of the Absorption of Ultrasound in Alcohols by the Optical Method With the Application of a Photo-Element With an AC Amplifier." Cand Phys-Math Sci, Moscow Oblast Pedagogical Inst, Moscow, 1953. (Referativnyy Zhurnal--Fizika Moscow, Apr 54)

SO: SUM 243, 19 Oct 1954

STREMOUSOV, VI

USSR

Investigation of ultrasonic absorption in monatomic alcohols by the optical method using photoelements with an alternating-current booster. V. P. Nozdrev and V. I. Stre-mousov (Moscow Regional Pedagog. Inst.). *Doklady Akad. Nauk S.S.R.* 96, 477-80 (1954).—The scheme of the app. used is provided. The arrangement is of such a nature that good temp. control is attained. The investigations were made at temps. from -70° to +100°. The low temps. were obtained with dry ice and EtOH. Absorption of ultrasonic waves in the following 10 homologous said., monat. alcs., was studied: ethyl, methyl, propyl, butyl, hexyl, nonyl, sec-butyl, isopropyl, isobutyl, and isoamyl. Comparison of the results with classical theory showed that they give a qualitatively clear picture of the effect of temp. on the coeff. of absorption. Quantitatively the exptl. results exceed the theoretical by a factor of 1.5-4. An analysis of the exptl. data showed that in a series of normal primary alcs., the absorption increases on transition from lower to higher alcs. The data are presented in the form of absorption curves. Gladys S. Macy

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(1)

STREMOUSHOV, V. I.

"Investigations of the Absorption of Ultrasound in Liquids by the Optical Method Using Photocells", a report presented at a conference of professors and teachers of the institutes of the Ministry of Education RSFSR and published in the "Application of Ultrasonics to the Investigation of Substances," Moscow, 1955.

STREMOUSOV, V. I.

Ultrasonic speed and the adiabatic compressibility of m-xylene
and CCl_4 along the saturation line. Uch. zap. Volg. gos. ped.
inst. no.11:80-84 '59. (MIRA 16:1)

(Ultrasonic waves—Speed) (Xylene)
(Carbon tetrachloride)

24.1900

S/194/62/000/006/118/232
D256/D308

AUTHOR: Stremcusov, V.I.

TITLE: Adiabatic compressibility of alcohol solutions of pyrocatechol

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-5-36 d (V sb. Primneniye ul'traakust. k issled. veshchestva, no. 12, M., 1960, 215-221)

TEXT: Results are presented of measurements of ultrasound velocity and adiabatic compressibility in solutions of pyrocatechol in n-propyl-isobutyl and isoamyl-alcohols under variation of the temperature and the concentration. The velocity of the ultrasound was measured using an interferometric method at a frequency of 1 Mc/s. The density of the solutions was determined using a piconometer. It was shown that the temp. dependence of the velocity for temp. from 20 to 90°C follows the law: $v = v_0(1 + \alpha t)$, where α - temp. coeff. ✓A.

The dependence of the velocity of the ultrasound upon the weight

Card 1/2

Adiabatic compressibility of ...

S/194/62/000/006/118/232
D256/D308

concentration C of pyrocatechol is also linear within the limits of the investigated concentrations: from 0 to 40 %, and it is described by the equation: $v = v_0 (1 + KC)$, where K - coeff. describing the slopes of the straight lines against the concentration axis. The values of α , K and v_0 are presented for various solutions and temp. 20 and 80°C. It is shown that the dependence of the adiabatic compressibility upon temp. and concentration is nonlinear; the temp. dependence being described by the equation: $\beta = a_1 t + b_1 t^{3/2}$. The compressibility decreases with increasing the concentration. It is shown that the solutions investigated follow Raoult's rule. 12 figures, 4 tables, 6 references. [Abstracter's note: Complete translation.]

Card 2/2

43022

S/194/62/000/010/047/084
A061/A126

M. M. O

AUTHOR: Stremousov, V.I.

TITLE: Ultrasonic interferometer with dropping reflector

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962,
16, abstract 10-5-31a (In collection: Primeneniye ul'traakust. k
issled. veshchestva, no. 13, M., 1961, 177 - 180)

TEXT: The design presented eliminates the deficiencies owing to which the use of ultrasonic interferometers is restricted to high temperatures and pressures and which reduce the reading accuracy. In this design the reflector, whose tail part is the solenoid core, drops under the action of gravity. The velocities are measured in liquid and gaseous isobutyl alcohol and propyl acetate at 610, 1,018 and 2,994 kc in a wide temperature range. An abrupt turning off of the current in the solenoid permits the reflector of the interferometer to drop very quickly (in fractions of a second), while a slow reflector shift is ensured by a slow solenoid motion. There are 2 figures and 4 references.

[Abstracter's note: Complete translation]

Ye.A.

Card 1/1

STREMOUSOV, V.I.

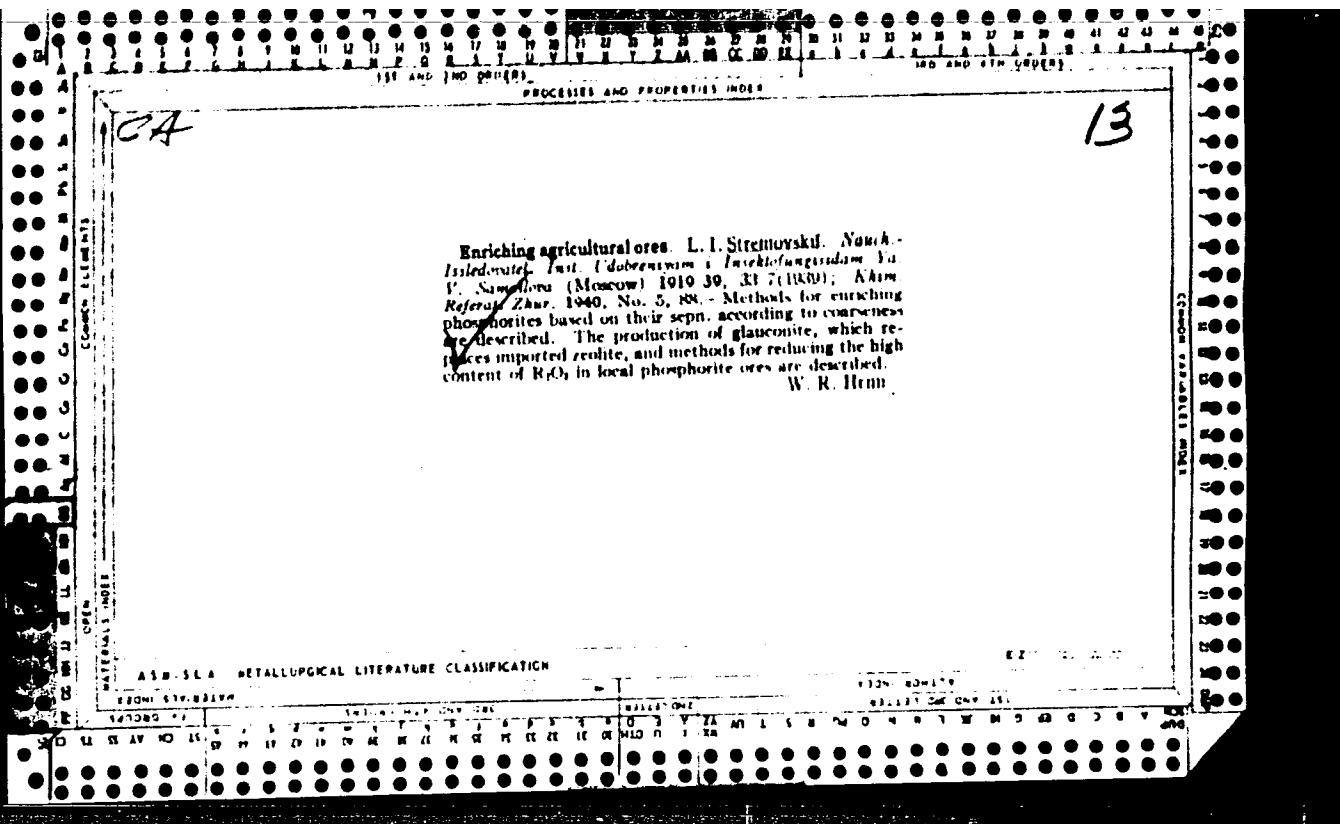
Simple ultrasonic interferometer. Prim.ul'traakust,k issl.
veshch. no.16:121-122 '62. (MIRA 16:4)
(Interferometer)

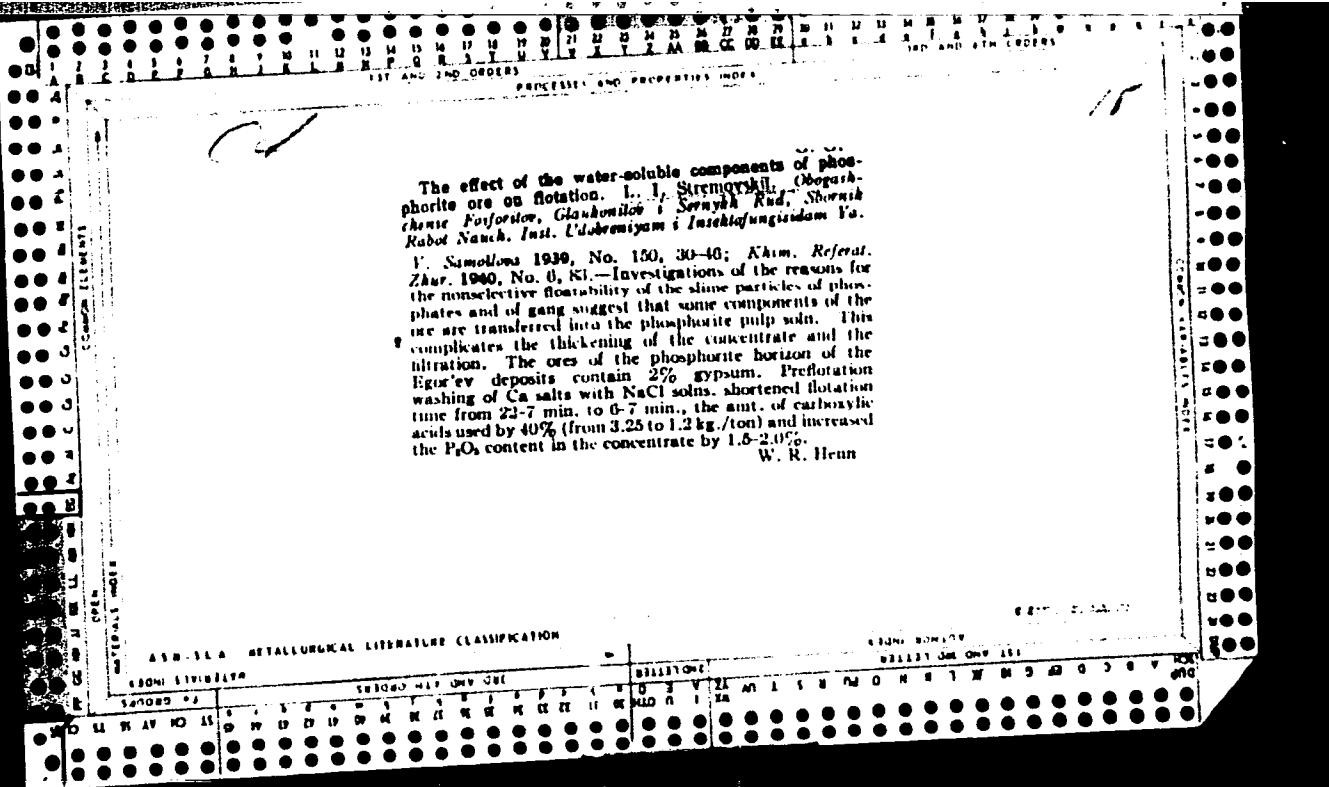
VAL'TER, A.A.; YEREMENKO, G.K.; STREMOVSKIY, A.M.

Calcium rinkite from Ukrainian alkaline rocks. Dokl. AN SSSR
150 no. 3:639-641 My '63. (MIRA 16:6)

1. Institut mineral'nykh resursov AN UkrSSR. Predstavлено
akademikom D.I. Shcherbakovym.
(Ukraine--Rinkite)

CP
Influence of mud on the flotation of phosphorites.
L. L. Stremovskii, *Mineral'naya Udobreniya i asktofizika* 1, No. 4, 61-7 (1935).—The flotation was carried out with ground minerals and synthetic mixts. An excess of mud carries off great proportions of the phosphorites, thus lowering their yields in the concentrate. The grain size is therefore of primary importance in the flotation and it should be adjusted to each type of mineral treated.
A. A. Bochtingk





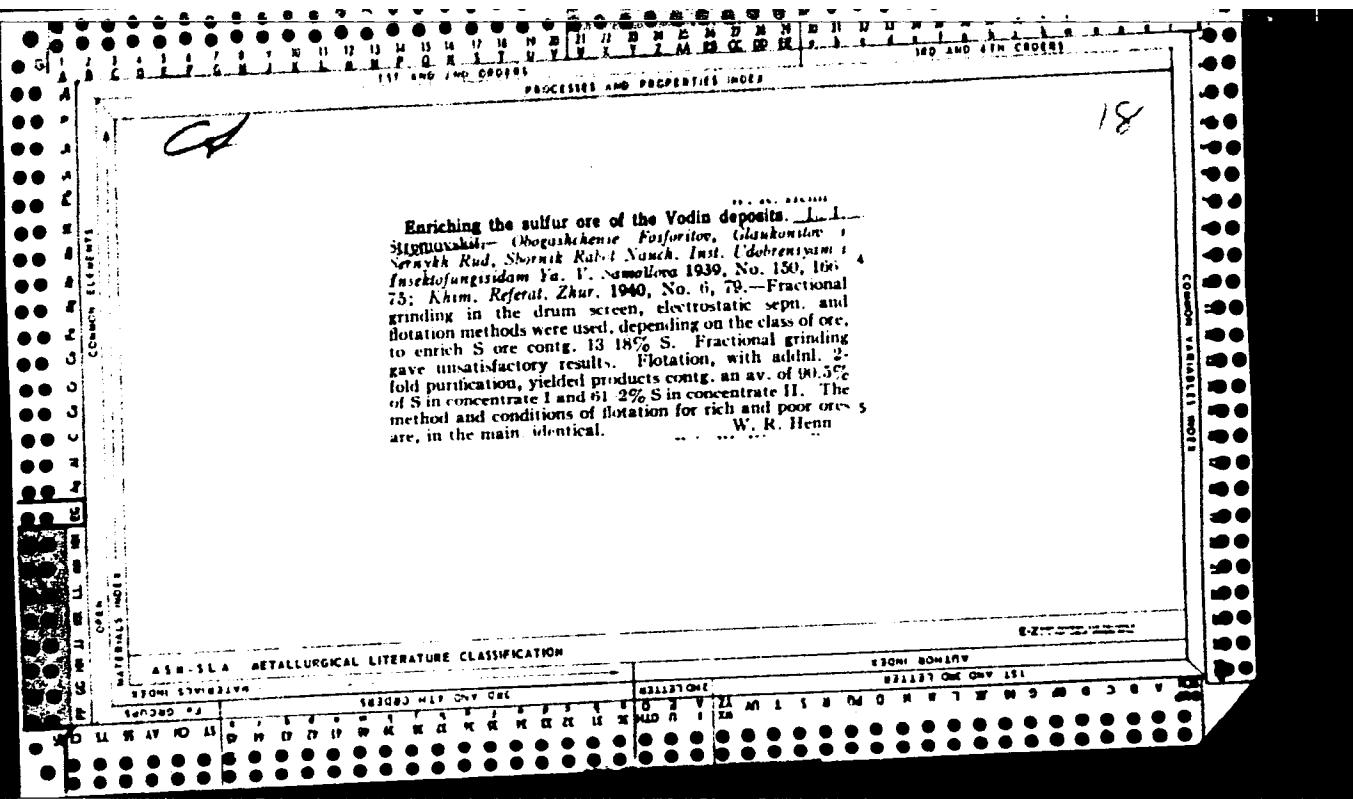
1ST AND 100 ORDERS 100 AND 1000 ORDERS

PROCESSES AND PROPERTIES INDEX

18

3. Flotation on a semiproduction scale of the Ryazan-Aktilon phosphorite ore from the Egorev' ore deposits. L. I. Strelcovskii. *Obozrzhchenie Fosforita, Gidrofotov i Nerykh Rul'*, Skornik Rabot Nauch. Inst. Udobreniyam i Tselokupnogazdami Yu. V. Samoilova 1939, No. 154, 73-82; Akim. *Referat. Zhur.* 1940, No. 6, 81. - Tests were made without preliminary roasting of the ore. The ore was ground to 100 mesh in a mill having a capacity of 1200 kg./hr., and leaving a residue of 8-10% on the screen. Particles less than 10 μ in the slime amounted to 40%. Optimum flotation results were obtained in a Fahnenwald machine. The P_2O_5 contents were: in concentrate 6%, in tailings 4% and in slimes 30%. The reagents used were carboxylic acids 2.5-3.0 kg./ton, with addn. of 0.25 kg./ton of alkali to regulate the pH, water glass (quartz depressor) 1.0-1.5 kg./ton and kerosene up to 20 kg./ton. The capacity of the thickener was 300 kg./hr., that of the filter 84.8 kg./hr./sq. m. The method described is not sufficiently efficient, owing to the large amts. of reagents required, low output of the filter and the high R_2O_5 content (up to 5.5%) in the concentrate.
 W. R. Henn

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION										EPRINTS														
ITEM NUMBER		SUBJECT HEADINGS								COLLECTOR		EPRINTS												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
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STREMOVSKIY, L. I.

FD 199

USSR/Chemistry - Flotation

Card 1/1

Authors : Stremovskiy, L. I., Arutyunyan, B. Sh.

Title : Characteristics of aeration in the deep airlift flotation machine

Periodical : Khim. prom. 4, 41-45 (233-237), June 1954

Abstract : On the basis of the experiments described, discuss the performance of airlift flotation machines as affected by various elements of their design, the chemicals added, and the type of operation. Three USSR references, all since 1940; one is translation of a US book. Six figures, three graphs, one table.

Institution : State Scientific Research Institute of Mining and Chemical Raw Materials

5(1)

AUTHOR:

Stremovskiy, L. I.

SOV/64-58-8-7/19

TITLE:

The Extraction of Phosphates From Ölilitic Sandstone by the Flotation Method (Izvlecheniye fosfata iz obolovykh peschanikov metodom flotatsii)

PERIODICAL:

Khimicheskaya promyshlennost', 1958, Nr 8, pp 476 - 481 (USSR)

ABSTRACT:

The experiments were conducted with the assistance of S. I. Sakharov and A. P. Tkachuk. In recent years it was found that the vicinity of the large phosphorite fields of Kingisepp holds other deposits of similar phosphorite. The deposits consist of loose quartz sand mixed with amorphous phosphate splinters ("obolidae"), the ratio quartz: phosphate being 3-4:1) The deposits have several advantages for industrial extraction, such as easy accessibility and the possibility to easily process the material by enrichment. The paper gives the results of granulometric tests carried out with the material. It is suggested to perform the preliminary enrichment of the phosphate ore, or rather the separation of the ore from pure quartz sand, by crushing the material in a steel ball grinder (balls with a diameter of 12 mm) followed by

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'The Extraction of Phosphates From Ölilitic Sandstone by the Flotation Method SOV/64-58-B-7/19

screening (with a 0.17 mm screen), in which way the phosphate content can be more than doubled (Fig 1, Table 1). A high-quality concentrate is then produced by flotation. This is done with such reagents as are being used for the flotation of öölitic sandstone phosphorites from the deposits Shchigrovsk, Polpinsk, and elsewhere, but with an addition of kerosene. The effect of kerosene on the extraction of P_2O_5 can be well observed with flotations of coarsely ground ores (Table 3), since the P_2O_5 extract increases by 40.2 to 84%.

Non-polar kerosene increases the water-repellency of cruder particles and the angle of contact (according to York (Ref 7)) and thus helps particles to cling to the air bubbles, but does not reduce the selectivity of the flotation process (Figs 8-12). Two thirds of the phosphate are extracted as a high-quality concentrate which serves as the raw-material for the production of superphosphate. The other concentrate is similar to phosphorite dust and can be used directly. There are 12 figures, 4 tables and 10 Soviet references.

Card 2/2

18(5)
AUTHOR:

Stremovskiy, L.I., Candidate of Technical Sciences

SOV/127-59-2-17/21

TITLE:

Comparing the Flotation of Carnallite and that of
Sylvite in Different Amines (Sravnitel'naya flo-
tatsiya karnallita i sil'vina razlichnymi aminami)

PERIODICAL:

Gornyy zhurnal, 1959, Nr 2, pp 72-75 (USSR)

ABSTRACT:

The author reports on his experiments aimed at finding the most suitable reagent for the flotation of carnallite, and indirectly for recovering metallic magnesium. The author introduces some corrections to the conclusions published by Bakhman (FRG, patent Nr 931702, 16 Aug 55), as well as to assertions of D. and M. Furstenau (Mining Engineering, 1956, Nr 3). Three types of collectors were tested: a) mixtures of fat acids having 7 to 9, 9 to 11 and 11 to 14 carbon atoms; b) sodium salts of sulfacids (Nekal, sulfanole, stearylamine, IM-11, amines from nitro-synthin ANP - formula of the GIPKh - State Institute of Applied Chemistry); c) technical primary amines from synthetic fat acids, and from tallow oil. The

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SOV/127-59-2-17/21

Comparing the Flotation of Carnallite and that of Sylvite in
Different Amines

conclusions of the author are: 1) the best collectors for carnallite are the primary amines from fat acids with less than 18 carbon atoms. Dodecyl amine is less efficient; 2) the amines from nitrrosynthin, the fat acids of the alkylaryl-sulfonates cannot serve as collectors for salts; 3) not only stearylamine and dodecyl amine, but also technical amines from synthetic fat acids, as well as those from tallow oil, are less efficient collectors for sylvite. There are 2 graphs, 5 tables and 4 references, 2 of which are Soviet and 2 English.

ASSOCIATION: Gosudarstvennyy institut gorno-khimicheskogo syr'ya,
g. Lyubertsy, Moskovskoy obl. (State Institute of
Mining-Chemical Raw Materials, Town of Lyubertsy,
oblast' of Moscow)

Card 2/2

STREMOVSKIY, L.I.; KNAUS, O.M.

Table flotation concentration of shell rock phosphorites.
Khim. prom. no.2:143-146 F '63. (MIRA 16:7)

(Phosphorites) (Ore dressing)

GINZEL'FARB, B.M.; MITROKHIN, N.V.; CHIKHALIA, G.V.; STHROVSKIY, L.I.

Exploiting phosphorite-bearing Karatau Basin. Khim. prom. no.5:
323-328 My '64. (MTRA 17:9)

RYSHCHENKO, M.I.; STREMOVSKIY, R.A.

Drying tiles on kiln cars. Stek. i ker. 19 no.6:35 Je '62.
(MIRA 15:7)

1. Khar'kovskiy plitochnyy zavod.
(Tiles) (Drying apparatus)

L 27283-65 EWT(d)/EWP(1) Po-4/Pq-4/Pg-4/Pk-4/P1-4 IJP(c) WW/BC

ACCESSION NR: AP4049385

G/0018/64/000/011/0508/0513

36
29
B

AUTHOR: Urban, E. (Graduate engineer); Stempel, D. (Graduate mathematician)

TITLE: Investigations of pneumatic linear measurement apparatus with test pressure transformers

SOURCE: Feingeratechnik, no. 11, 1964, 508-513

TOPIC TAGS: control system, pneumatic control device, linear measurement device, pressure transformer technology

ABSTRACT: The authors report on the checkout of a linear-measurement tester hook-up with a pneumatic test transformer. This apparatus enables industrial testing personnel to use low-pressure testers for high-pressure testing purposes as well. Aside from the economy realized through the elimination of separate equipment, the advantages of this technique include a vertical-scale readout (on the low-pressure component) for multi-test apparatus; this is an improvement over the conventional high-pressure gage dial. A key component of the instrument, described in the article, consists of metallic-fold bellows interpolated between the high and low pressure components to convert jet controlled head-pressure to low test pressure.

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L 27283-65

ACCESSION NR: AP4049385

values. However, in cases where the test object is a miniaturized specimen which requires the use of a highly reduced test jet and therefore an equally highly reduced head-pressure jet, the time lost by filling up the tubing and gage exceeds any tolerable limits of industrial use. In this case, a design modification is proposed whereby jets and transformer are packaged into a compact small unit for optimally timed testing purposes. Another precision testing modification involves a zero-point jet provided for variable ambient temperature control of any zero-point pressure shifts to extend the maximum indicator range. Orig. art. has: 10 figures and 4 formulas.

ASSOCIATION: Deutsche Akademie der Wissenschaften, Berlin-Adlershof (German Academy of Sciences)

SUBMITTED 00

ENCL: 00

SUB CODE: IE

NO REF SOV: COO

OTHER: 003

Card 2/2

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653520013-5

STREL'INSKAYA, YADV.

State Scientific Institute of Agriculture, Lulavy.
"Formation of mycorrhiza in cereals."
SO: MIKROBIOLOGIYA, Vol. 20, No. 2, March/April 51.

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653520013-5"

STREMSKIY, A.G.

Discussion. Trudy VNII no.25:188-189 '59.

(MIRA 15:4)

1. Zhirnovskoye neftepromyslovoye upravleniye.
(Bakhmet'yeskoye region (Volgograd Province)--Oil reservoir engineering)

AUTHOR:

Stremyakov, A.Ya.

TITLE:

132-58-3-7/15

The Application of the Hydro-Chemical Searching Method for
Ore Deposits in Rocks Under Permafrost Conditions (K voprosu
primeneniya gidrokhimicheskikh poiskov rudnykh mestorozhdeniy
v usloviyah znoyletnehzemlyakh peresa,

PUBLICAL:

Nauvedka i Okhrana Nedr, 1958, N^o 3, pp 46-47 (USSR)

ABSTRACT:

The author describes how, with aid of chemical analyses of
the water samples taken from the Chukotskiy Peninsula, where
the ground is permanently frozen, he had located six sectors
where sulfide ore-deposits were to be found in accordance with
his analyses.

ASSOCIATION:

Ministerstvo geologii i okhrany nedr SSSR (Ministry of Geology
and of Conservation of Mineral Resources of the USSR)

AVAILABLE:

Library of Congress

Card 1/1

1. Sulfide ores-Sources
2. Permafrost-Mineral survey
3. Geophysical prospecting-Arctic-USSR

BOGDAN, V., dr.; BOGDAN, Galina, dr.; ILCENCO, A., dr.; URLA, C., dr.;
STRENC, I., dr.

Pleural calcifications as a problem in diagnosis of lung
pathology. Med. int., Bucur. 8 no.4:596-602 Aug 56.

1. Lucrare efectuata in Sanatoriu de tuberculoza T. Vladimirescu
Raion Tg. Jiu.

(TUBERCULOSIS PULMONARY, differ. diag.
pericardial, intra-pulm. & other pleural calcifications)

(PLEURA, diseases

calcifications, pericardial, intra-pulm. & others
causing diag. problems in tuberc. & other lung dis.)

DDV/109-3-9-18/20

AUTHOR: Strendberg, E. V. P.

TITLE: The Problem of Automatic Phase Tuning in Microwave Oscillators (K voprosu o fazovoy avtomaticheskoy chastyoti generatorov s antisinteticheskimi volnami)

PERIODICAL: Radiotekhnika i elektronika, 1958, Vol 3, Nr 9,
p 1220 (USSR)

ABSTRACT: I. L. Bershteyn and V. L. Sibiryakov published a paper in this journal (1958, Vol 3, Nr 2, pp 290-291), in which they described an oscillator employing the automatic phase control system and stated that the author could obtain only very narrow tuning ranges in his automatic phase tuning system which he described in Proc.I.R.E.1955, Vol 43, Nr 7, p 831. In this letter the author points that Bershteyn and Sibiryakov interpreted his results erroneously.

ASSOCIATION:

Massachusetts Institute
of Technology, Electronic Research Institute, Cambridge, Mass.
SUBMITTED: May 7, 1960.

Card 1/1

STRENEV, V.F.

New forms of registration work. Zdrav. Ros. Feder. 6 no.2:35-37
F '62. (MIRA 15:3)

1. Iz bol'nitsy No,2 Verkhisetskogo rayona Sverdlovska.
(MEDICAL RECORDS)

6,9411
9,2150 (1159,1482)

29908
S/548/61/000/011/005/008
E194/E455

AUTHOR:

Strelge, D.F.

TITLE:

The germanium rectifier as a source of radio-interference

SOURCE:

Akademiya nauk Latviyskoy SSR. Institut energetiki i elektrotehniki. Trudy no.11. Riga, 1961.
Poluprovodniki i ikh primenenie v elektrotehnike no.1. 61-72

TEXT: Power germanium rectifiers are becoming more widely used but one of their disadvantages is that they can be a source of radio-interference. This was particularly observed in testing and operating a new electrical supply system for railway cars. Power germanium rectifiers BP-50 (VG-50) connected in a three-phase bridge circuit set up noise in the train radio equipment and the noise was clearly due to the rectifiers. Published work indicates that possible sources of radio-interference in germanium rectifiers are: (1) marked distortion of generator phase-current waveshape and (2) distortion of rectifier current waveshape resulting from their diffusion capacitance of "hole-accumulation". The first of these causes is well known but the effect is likely to be more

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The germanium rectifier as ...

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marked than with selenium rectifiers because of the lower internal resistance in the conducting direction and the higher rectification factor of germanium elements. The second cause has been discussed (Ref.3: E. Götz, H. Heizerling, H. Lott, ETZ-A, 1959, no.15, 503-512; Ref.4: K. Seiler, H. Wucherer, Nachrichtentechn. Fachberichte (NTZ-Beihefte), v.1, 1955, 3-10). A semiconductor diode operating a rectifier circuit has a volt-ampere characteristic that differs from the static one. The forward current of the rectifier element displays a certain inertia as it diminishes and passes through zero. In the inverse direction the current passes through zero at a steady rate and the curvature of the current curve remains unchanged. After a certain time interval, there is a sudden drop in the current to the value that corresponds to the inverse current on the volt-ampere characteristic. This has been observed on oscilloscopes. The inertia effect is particularly marked at high-frequency voltages. At the instant when the current ceases to flow, the voltage on the rectifier element suddenly rises to a value practically equal to the instantaneous inverse voltage. The effect results from redistribution of charge carriers in the junction during the period in which the forward

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The germanium rectifier as . . .

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E194/E455

current is changing to the inverse current. Published work indicates that the diode current displays inertia in both directions and in both cases the inertia causes distortion of the current and voltage curves. Oscillograms show that during these periods high-frequency oscillations may be set up in the current curves. Moreover these oscillations in the voltage curves, besides generating radio noise may be one of the causes of rectifier element breakdowns. The high frequency voltages set up a whole range of radio frequency voltages in the rectifier circuit. Measurements were made of the radio interference field intensity of three-phase bridge circuits using rectifiers BT-10 (VG-10) and VG-50. The field strength was found to be higher at the lower frequencies. For example, at a frequency of 0.16 Mc/s a level of 400 to 500 microvolts/metre was measured. Measurements of interference voltage were also made on the output terminals of a number of rectifier equipments and again the highest values were observed at the lower frequencies; at a frequency of 0.16 Mc/s the interference voltage may be as much as 8000 to 10000 microvolts. At higher frequencies both the field intensity and the interference voltage levels drop until at 2 to 3 Mc/s they almost completely Card 316 *g* X

The germanium rectifier as

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E194/E455

merge into the general background noise level. Certain authors have recommended the use of RC filter units in parallel with each rectifier element or at the input terminals of the rectifier to suppress switching over voltages and radio-interference. However, it has been shown that these overvoltages can be reduced by capacitors connected in delta on the a.c. terminals of the rectifier. For units with outputs up to 50 kW capacitors of 4 microfarads were required and for units above 50 kW 10 microfarads. However tests have shown that the simplest and most effective way of suppressing radio-interference is to connect capacitative filter circuits to the output terminals of the rectifier. A graph demonstrating the consequent reduction of radio-interference is shown in Fig. 7. Interference voltage in millivolts is plotted against capacitance in microfarads for a frequency of 0.16 M./s. at which the interference voltage is greatest. It will be seen that a capacitance of 0.5 or 1 microfarad reduces the radio-interference to a level of 250 microvolts which meets existing standards. A 1 microfarad capacitor suffices for rectifiers of 4 Soviet-bloc and 12 non-Soviet bloc. There are 7 figures and 16 references.

Card 4/65 X

The germanium rectifier as ...

29908

S/548/61/000/011/005/008
E194/E455

English language publications read as follows:

Ref.2: O. Markowitz. Applications and Industry, January 1960, no.46;
Ref.5: B.R. Gossick. J. Appl. Phys., v.26, 1955, 1356-1365.

✓

Card 5/10

S/194/62/000/002/050/096
D201/D301

9,2540

AUTHORS: Puritis, T. Ya. and Strenge, D. F.

TITLE: An arrangement for determining the volt-ampere characteristics of semiconductor power devices

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 2, abstract 2-4-31zh (Tr. In-ta energ. i elektrotehn., AN LatvSSR, 1961, 11, 73-86)

TEXT: The proposed arrangement makes it possible to determine at various temperatures with an oscilloscope the dynamic volt-ampere characteristics of semiconductor power-diodes (type $\text{NBK}-100$ (PVK-100)). The use of single-polarity pulses (half-wave sinusoid) permitted a considerable lowering of power consumed by the arrangement. The arrangement allows taking either the forward or the reverse branch of the semiconductor diode characteristic for average d.c. currents up to 200 A and max. reverse voltage of 1200 V. The arrangement consists of two independent sections (the experimental bench with a thermostat and an electronic device for recording the

Card 1/2

✓ B

An arrangement for ...

S/194/62/000/002/050/096
D201/D301

volt-ampere characteristic in graduated coordinates). The experimental bench operates at a frequency of 50 c/s. The basic circuit connections for taking the forward and reverse branches of the diode characteristic, the complete circuit diagram of the experimental bench and their respective descriptions are given. The electronic recording installation permits determination of the volt-ampere characteristic in any of the quadrants of graduated coordinate system on the screen of a single beam CRO; the axes are shown during the half-period when there is no voltage across the diode. The graduation of the coordinates can be changed within wide limits. The electronic arrangement has a spherical generator of single-polarity voltage pulses for the presentation of graduated axes, a commutator (switching in to the bench either the CRO inputs or the generator of the graduated axes voltage) and a unit of commutator operation control. The basic circuit diagrams of the generator, electronic arrangement and the bloc-diagram of the latter are given. The principles of operation of the arrangement are described. A photograph of the volt-ampere characteristic of a semiconductor diode as reproduced in graduated coordinates at the CRO screen is given. 4 references. /- Abstracter's note: Complete translation. 7

6.9411

S/194/62/000/005/090/157
D222/D309

AUTHOR: Strenge, D.F.

TITLE: Germanium rectifier as noise source

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 5, 1962, abstract 5-5-63 shch (Tr. in-ta energ. i
elektrotekhn. AN LatvSSR, 1961, 11, 61-72)

TEXT: The radio interference caused by germanium rectifiers supplying the electrical equipment of passenger wagons was investigated. The voltages across the germanium rectifiers and at the output of the rectifier unit were determined with an oscilloscope. The field strength of the radio interference in the 0.1 - 10 mc/s band was measured. The interference is due to the commutative distortion of the voltage curve, and to the inverse currents of the germanium rectifiers. The interference can be reduced by the use of capacitive filters. [Abstractor's note: Complete translation].

✓C

Card 1/1

RAJKOVITS, Karoly, SEBESTYEN, Janos; STRENGER, JANOS

A Pecsi Orvostudomanyi Egyetem Szemeszeti Klinikajarak
(Igazgato: Boros, Bela, egyet. tanar) es Korbonctani Inte-
zetek (Igazgato: Romhanyi, Gyorgy, egyetemi tanar) koz-
lemenye.

SEBESTYEN, Janos, dr.; STRINGER, Janos, dr.

Progressive subacute panencephalitis & its relationship to
ophthalmology. (Cases of central chorioretinitis). Orv. hetil.
106 no. 5:211-214 31 Ja '65

1. Pecs Orvostudomanyi Egyetem, Szemklinika.

51 RENHELL, H.

RUMANIA/Chemical Technology, Chemical Products and Their
Application, Part 1. - Water Treatment, Sewage.

H-5

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 32930.

Author : I. Solomon, E. Cioara-Copolovici, H. Strenhell.

Inst : Not given.

Title : Changes of Biochemical Oxygen Consumption under
Influence of Some Organic and Mineral Substances.

Orig Pub: Igiena, 1957, 6, No 1, 72-79.

Abstract: An addition of lactose and peptone (1 to 100 mg per liter) furthers the biochemical oxygen consumption (BOC); the influence of peptone is stronger. The salts of heavy metals in concentrations from 0.05 to 10 mg per liter decrease the BOC, viz.: Ba, Mn and Fe by 50 to 75%, Pb, Cd, Cr, Zn and Co to a half or a third, Ag and Cu to a quarter, Hg to a tenth or

Card : 1/2

15-

STREMIN, M.O.

Effect of anaesthesia on the liver; a survey of Soviet and foreign literature. Vest.khir. no.8:120-133 '61. (MIRA 15:3)

1. Iz kliniki obshchey khirurgii (zav. - prof. A.V. Smirnov)
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.
(LIVER) (ANESTHESIA)

SIRENK, Tamás

Up-to-date setting of texts of maps. Geod kart 15 no. 5:363-368
'63.

STREPETOV

STREPETOV, I.

How we analyze the title records of a construction project.
Fin.SSSR 18 no.6:49-54 Je '57. (MIRA 10:12)

1. Nachal'nik planovo-ekonomiceskogo otdela Ukrainskoy
respublikanskoy kontory Prombanks.
(Ukraine--Banks and banking) (Construction industry--Finance)

1. STR.FETOV, L. M., ENG.; DAVTDOV, S. G., ENG.
2. USSR (600)
4. Cement - Testing
7. Colorimetric method of determining the amount of plasticizer in cement.
Biul. stroi. tekhn. 9 no. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

STREPETOV, N. P.

"Investigating the Synthesis and Some of the Reactions of
para-Halogeno-benzene Sulfamides." Cand Chem Sci, Voronezh U,
Voronezh, 1954. (RZhKhim, No 21, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

STREPETOV, N.P.

Synthesis of p-halobenzenesulfonamides. Trudy VGU 49 '58.
(MIRA 13:5)
(Benzenesulfonamide)

STREPETOV, N.P.

Reactions of p-halobenzenesulfonamides with glycide, and with
glycerol α -chlorohydrin. Trudy VGU 57:155-167 '59.
(MIRA 13:5)
(Benzenesulfonamide) (Propanediol) (Glycidol)

STREPETOV, N.S.

Automatic feed of sand mixture to the coremaking department. Lit.
proizv. no.11:15-18 N '61. (MIRA 14:10)
(Coremaking) (Automatic control)

STREPETOV, N.S.

Additional multiposition regulating device for secondary instruments.
Priborostroenie no.7:29 Jl '62. (MIRA 15:7)
(Electronic control)

STRELETOV, Vasiliy Ivanovich; OZEROV, V.S., red.

[Sinister webj Zloveshchaja pautina. Leningrad, Lenizdat,
1965. 198 p.]

(MIK) 144.1)

STREPETOV, Ye. K., inzh.

Competition of machinery operators. Biul. tekhn. inform. 4 no. 6:29
Je '58. (MIRA 11:7)

(Socialist competition)

BOZHENKOVA, N.; STREPETOVA, L.

Care for the health of women workers. Okhr. truda i sots.strakh. 4
no.1:18-19 Ja '61. (MIRA 14:3)

1. Predsedatel' komissii sotsial'nogo strakhovaniya Yartsevskogo
khlopchatobumazhnogo kombinata (for Bozhenkova). 2. Strakhovoy delegat
pryadil'noy fabriki No. 1 Yartsevskogo khlopchatobumazhnogo kombinata
(for Strepetova).

(Yartsevo—Textile industry—Hygienic aspects)
(Women—Health and hygiene)

TROFIMOV, Petr Mikhaylovich; BAKOVETSKIY, O., red.; STREPETOVA, M., mlad.
red.; NOGINA, N., tekhn. red.

[Studies on the economic development of the European part of
northern Russia] Ocherki ekonomicheskogo razvitiia Evropeiskogo
Severa Rossii. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1961.
262 p. (MIRA 14:10)

(Russia, Northern—Economic conditions)

MOTYLEV, Vol'f Yevnovich, prof.; Prinimali uchastiye: LEVKOVSKIY, A.I.,
kand. ekon. nauk; PAVLOV, V.I., kand. istor. nauk; MOTYLEV, V.V.,
kand. ekon. nauk, dotsent; KONYAYEV, A.I., kand. ekon. nauk,
dotsent; CHEKHUTOVA, V., red.; STREPETOVA, M., mladshiy red.; MO-
SKINA, R., tekhn. red.

[Economic history of foreign countries; epoch of premonopolistic
capitalism] Ekonomicheskaya istoriya zarubezhnykh stran; epokha
monopolisticheskogo kapitalizma; kurs lektsii. Moskva, Izd-vo
sotsial'no-ekon. lit-ry, 1961. 399 p. (MIRA 14:9)
(Economic history)

ZVORYKIN, A.A., doktor ekon.nauk,prof.; OS'MOVA, N.I., nauchnyy
sotr.; CHERNYSHEV, V.I., kand.tekhn.nauk; SHUKHARDIN,S.V.,
kand.tekhn.nauk; MILONOV, Yu.K., kand.ekon.nauk,otv.red.;
BAKOVETSKIY,O., red.; STREPETOVA, M., mladshiy red.;
MOSKVINA, R., tekhn. red.

[History of technology]Istoriia tekhniki. [By] A.A.Zvorykin i
dr. Moskva, Sotskgiz, 1962. 772 p. (MIRA 15:8)

I. Akademiya nauk SSSR. Institut istorii yestestvoznaniya i
tekhniki.

(Technology)

Excerpta Medica 2/6 sec 15 June 55 Tuberculosis & Pulmonary Disease

1278. STREPETOVA T.N. * Intratracheal administration of streptomycin in cavitary pulmonary tb PROBL.TUBERK. 1954, 2 (35-39) Illus. 4 (Russian text)

As the experiences with intratracheal therapy in the USSR concern only a relatively small number of cases, no definite conclusion can as yet be drawn. It seems that recent cases show more success. Subpleural apical cavities and those under pneumothorax cannot be influenced, neither are cavities of the lower lobes accessible.

Frey - Berlin

USSR/Pharmacology. Toxicology. Chemotherapeutic
Preparations. Anti-Tuberculous Remedies.

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102920

Author : Strepetova, T. N.

Inst : -

Title : A Comparative Evaluation of the Concentration of
Streptomycin in Lungs, Kidneys and Blood with
Intratracheal and Intramuscular Introduction.

Ori^g Pub: Antibiotiki, 1957, 2, No. 4, 38-41

Abstract: Experiments were conducted on 35 rabbits. The
content of streptomycin (I) in the lungs, kidneys
and blood of the rabbit after intratracheal (ITI)
and intramuscular (IMI) introduction (20,000
units per 1 kg) was determined by the semicarba-
zide colorimetric method, at the foundation of
which lies the reaction of interaction of "stained"

Card 1/3

28

V

USSR/Pharmacology. Toxicology. Chemotherapeutic
Preparations. Anti-Tuberculous Remedies

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653520013-5"
Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102920

V

semicarbazide with the aldehyde group of the
molecule of I. Maximum content of I in the lungs
was reached 4-6 hours after introduction of I by
one or the other method. In ITI its maximum con-
tent in lungs was 22 times larger than in IMI.
48 hours after I introduction to rabbit, its con-
centration in the lungs in ITI was 9 times higher
than in IMI. In the blood, during the first 2
hours, a greater concentration of I was deter-
mined in IMI; in subsequent hours after I intro-
duction by this method, its content decreased
sharply, and, after 18 hours, it was no longer
discovered in the blood. In ITI, the content of
I in blood decreased slowly and was still deter-
minable after 24 hours. In the kidneys, the con-
tent of I in the first 8 hours was higher in IMI
and after 10 hours in ITI: in IMI, I was estab-

Card 2/3

SEVERETOVA, T.N., Cand Med Sci -- (diss) "Treatment
by means of intrabronchial ~~injection~~ ^{luminotherapy} of streptomycin
of patients with cavernous tubercles ~~lesions~~ of the
lungs (Clinical X-ray observation and experimental
studies)." Len, 1958, 18 pp (Len State Order of Lenin
Inst for the Advanced Training of Physicians im S.M.
Pirov) 200 copies (KL, 29-58, 137-8)

- 130 -

STREPETOVA, T.N.

Effect of intrabronchial streptomycin on bronchial interoceptors.
Antibiotiki 4 no.3:62-65 My-Je '59. (MIRA 12:9)

1. Rentgenologicheskiy otdel (zav. - prof.A.M.Rabinovich)
Leningradskogo instituta tuberkuleza.
(BRONCHI, eff. of drugs on,
streptomycin, on interoceptors (Rus))
(STREPTOMYCIN, eff.
on bronchial interoceptors (Rus))

RABINOVICH, A.M., prof.; STREPETOVA, T.N., mladshiy nauchnyy sotrudnik

Effect of the nervous system on the rate of resolution of pulmonary
atelectasis; an experimental study. K izuch.roli nerv.sist.v pat.,
immun.i lech.tub. no.2:377-384 '61. (MIRA 15:10)

1. Iz rentgenologicheskogo otdeleniya (rukovoditel' - prof.
A.M.Rabinovich) Leningradskogo nauchno-issledovatel'skogo
instituta tuberkuleza.
(LUNGS--COLLAPSE) (NERVOUS SYSTEM)

SEMELEV, A.B.; SHTETINOV, T.N.; FEDOROV, N.S. t. RUMYANTSEVA, K.A.

Clinical aspect and course of pulmonary tuberculosis in
elderly persons. Trudy TEPU 63:30-35 1983. (MIRA 17:9)

1. Kafedra legochnogo tuberkuleza Leningradskogo instituta
usovremenizovaniya vrachey imeni Kirova i Leningradskiy
nauchno-sledovatel'skiy institut tuberkuleza.

Strepikhayev, Aleksandr Aleksandrovich
Osnovy Khimii Vysokomolekulyarnykh Soyedineniy [BY]
A.A. Strepikhayev and V.A. Derevitskaya. Moskva,
Goskhimizdat, 1961.
354 p. Diagrams., Graphs, Tables.
Includes Bibliography.

MINOMOVA, N.S.; STREL'KHEV, A.R. [deceased]; RUGOVII, I.I.

Polymerization of γ -substituted lactams. Vysokomolosod. 5 no.7:
1097-1100 Jl '63. (JIN. 16:9)

I. Moskovskiy tekstil'nyy institut.
(Lactams) (Polymerization)

STREPIKHLEYEV, YU. A.

"On the 4-Phenyl-, 4-Tiazine," Zhur. Oshch. Khim., 14, No. 4-5, 1944.
Mr., Moscow Order Lenin Chemico-Technological Inst., Im. D. I. Mendeleev,
-1-2-

Ca

1ST AND 2ND QUARTER	3RD AND 4TH QUARTER																								
PROCESSING AND PROPERTIES INDEX																									
<p>4-Phenyl-1,4-thiazine. V. V. Korshak and Yu. A. Strepikhov. <i>J. Gen. Chem. (U.S.S.R.)</i> 14, 312-15 (1944) (English summary).—Aniline (60 g.) and 25 cc. H₂O were treated with ethylene oxide at 70° until the theoretical wt. gain was reached; on distn. there was obtained 80% <i>N,N'-bis(2-hydroxyethyl)aniline</i>, bp 200-4°, m. 85-8° (from EtOH) (<i>picrate</i>, m. 119-20° (from EtOH)). The above (60 g.) was treated with 60 g. PCl₅ in 100 cc. CHCl₃, heated on a steam bath until HCl evolution ceased, the solvent was removed, and the residue recrystd. from MeOH to yield 64% <i>N,N'-bis(2-chloroethyl)aniline</i>, m. 30-8°. This (10 g.) in 80 cc. EtOH and 2 g. Na₂S were refluxed for 2 hrs. to yield an almost quant. amt. of <i>4-phenyl-1,4-thiazine</i>, bp 100-2°, m. 32.3-2.6° (from EtOH), b₁ 140°, b₂ 155°, bp 180°, b₂ 184°, bp 190; <i>picrate</i>, m. 141-2°; <i>ZnCl salt</i>, m. 115° (from EtOH); <i>HCl salt</i>, m. 102°. The thiazine (5 g.) in 5 cc. 5 N HCl was treated with 2.5 g. NaNO₂ in 10 cc. H₂O to yield a cryst. <i>4-p-nitrophenyl-1,4-thiazine-HCl</i>; <i>free base</i> (by treatment with Na₂CO₃), m. 80° (from Et₂O). PhNHCH₂CH₂OH was treated with PCl₅ in CHCl₃ to yield a dark oil which rapidly deteriorated on standing; a freshly prepnd. sample refluxed with Na₂S in EtOH also gave 4-phenyl-1,4-thiazine. PhNHCH₂CH₂OH (50 g.) in 100 cc. CHCl₃ was treated with 30 g. PCl₅, the soln. was washed with water and Na₂CO₃ soln., dried, and coccd. to yield <i>1,4-diphenyl-piperazine</i>, m. 103-4° (from Et₂O); the same is obtained by heating to 140° a mixt. of 43.6 g. PhN(CH₂CH₂Cl)₂ and aniline. On the basis of the above the reported prepns. of 4-phenyl-1,4-thiazine by Helfrich and Reid (C.A. 14, 2480) is erroneous. G. M. Kosolapoff</p>																									
ASME-ISA METALLURGICAL LITERATURE CLASSIFICATION																									
<table border="1"> <tr> <td colspan="2">ASME STANDARDS</td> <td colspan="2">SAE/ASME MAP ONLY ONE</td> <td colspan="2">WELDING</td> <td colspan="2">ASME BOMIN</td> </tr> <tr> <td>SAE</td> <td>ASME</td> <td>SAE</td> <td>ASME</td> <td>WELDING</td> <td>ASME</td> <td>BOMIN</td> <td>ASME</td> </tr> <tr> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> </table>		ASME STANDARDS		SAE/ASME MAP ONLY ONE		WELDING		ASME BOMIN		SAE	ASME	SAE	ASME	WELDING	ASME	BOMIN	ASME	100	100	100	100	100	100	100	100
ASME STANDARDS		SAE/ASME MAP ONLY ONE		WELDING		ASME BOMIN																			
SAE	ASME	SAE	ASME	WELDING	ASME	BOMIN	ASME																		
100	100	100	100	100	100	100	100																		

STREPIKHEYEV, A.A., kandidat tekhnicheskikh nauk; POLYAKOV, K.A., professor
STREPIKHEYEV, Yu.A., kandidat khimicheskikh nauk

Phenol-aldehyde compositions with low-temperature polymerization.
Khim.prom.no.3:83-84 Mr'47. (MIRA 8:12)

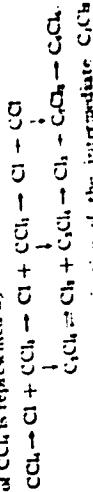
1. Nauchno-issledovatel'skiy institut khimicheskogo mashinostroeniya.

(Plastics)

10

V. V. Korshak, Yu. A. Strepiakov, and L. P. Verlakova (D. T. Mendeleev Chem. Technol. Inst., Moscow), *J. Gen. Chem. (U.S.S.R.)* 17, 1626-31 (1947) (in Russian). (1)

Chlorination of active C, dried at (2), with Cl mixed with SCH_3 , yielded some CCl_4 at 700-800°; admixture of SCH_3 or of fCCl_3 was ineffective, nor was any CCl_4 formed in attempt to chlorinate by heating a mixture of CCl_4 with SCH_3 in a sealed tube 100 hrs. at 350-400°. (2) Thermal decompr. of CCl_4 vapor over active C, dried at a given temp. with increasing rate of flow r , and, at const. r , linearly with the temp.; at $r = 0.10$, 0.60, 3.10 k/min., the wt.-% CCl_4 decompr. was: at 400°, 12.1; 61.4%; at 500°, 21.4; 17.6; 10.6; at 600°, 20.5; 25.0; 15.1; at 700°, 52.5; 31.0; 23.9. The decrease of the decompr. yield with decreasing time of contact is rapid, while with further increasing r , it becomes considerably slower with further increasing r ; the slopes of the lines giving the degree of decompr. as a function of the temp. are steeper the lower the temp. The catalytic effect of C on the decompr. of CCl_4 is demonstrated by 2 runs without C; at $r = 0.10$ and 1.50 wt.-% CCl_4 decompr. at 400°, 0.0 and traces, at 700°, 36.0 and 15.0; the degree of decompr. reached at 500° in the presence of C is attained only at 700° in the absence in the presence of the catalyst. (3) The products of the thermal decompr. of CCl_4 are Cl_2 , CCl_3 , C_2Cl_2 , and CCl_2 , and a compn. of CCl_4 is formed, while higher temp. (400°) favors formation of C_2Cl_2 and particularly CCl_3 . (4) Thermal decompr. of CCl_4 on active C in CCl_4 . (5) The catalytic effect of SCH_3 on the thermal decompr. of CCl_4 is due to the reactions: $2\text{SCH}_3 + \text{CCl}_4 \rightarrow \text{C}_2\text{S}_2 + \text{S}_2 + 2\text{Cl}_2$; $\text{C}_2\text{S}_2 + \text{S}_2 \rightarrow \text{CS}_2 + \text{S}_2$; $\text{CS}_2 + 3\text{Cl}_2 \rightarrow \text{CCl}_2 + \text{S}_2\text{Cl}_2$. The mechanism of the thermal decompr. of CCl_4 is represented by



The assumed polymerization of the intermediate CCl_2 into C_2Cl_2 is in agreement with Orl and Iltius (Can. J. Chem. 31(3)).

86677

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B020/B060

15.8109

AUTHORS: Artem'yev, A. A., Strepikhayev, Yu. A., Babkin, B. M.,
Khaylov, V. S., Romanovskiy, V. I.

TITLE: A Commercial Process of Esterifying Terephthalic Acid

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 8, pp. 9-15

TEXT: The present paper offers the principal results obtained by the authors from their laboratory method for the noncatalytic esterification of terephthalic acid and relative checking in the pilot plant. Fig. 1 shows the dependence of the esterification rate on temperature, and Fig. 2 the dependence of the esterification degree on pressure at 250°C. Fig. 3 illustrates the dependence of the esterification degree on the terephthalic acid : methanol ratio at 250°C, and Fig. 4, the dependence of the solubility of terephthalic acid in methyl alcohol on the monomethyl terephthalate content at 20°C. The dependence of the esterification degree on the water content in the reaction mixture and on the duration of process at 250°C is illustrated in Fig. 5. Table 1 gives the composition of the products for different esterification degrees, while Fig. 6 graphically depicts

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A Commercial Process of Esterifying
Terephthalic Acid

S/064/60/000/008/004/008
B020/B060

the dependence of the composition of products on the esterification degree. Fig. 7 shows the dependence of the composition of terephthalic acid esterification products on the duration of process at 250°C. Table 2 gives composition, amount, and yield of esterification products of terephthalic acid in the presence of monomethyl terephthalate for various processing times. Fig. 8 is a graph illustrating the dependence of esterification degree on temperature under the conditions of the continuous and periodic procedures. Because spiral-tube reaction apparatus are very voluminous, a multiple-thread double-tube apparatus was designed, built, and tested (Fig. 9). Based on data obtained in the laboratory, a pilot plant was projected and set up for the esterification of terephthalic acid (diagram of Fig. 10). The plant consists of three main elements: 1) for the preparation of the initial suspension, 2) for the esterification proper, and 3) for the purification of dimethyl terephthalate by recrystallization. There are 10 figures, 2 tables, and 18 references: 2 Soviet, 6 US, 3 German, 2 British, 1 Polish, 1 Chinese, 1 French, 1 Japanese, and 1 Danish.

Card 2/2

ARTEM'YEV, A.A.; STREPIKHEYEV, Yu.A.; BABKIN, B.M.; KHAYLOV, V.S.;
ROMANOVSKIY, V.I.

Industrial method for the esterification of terephthalic acid.
Khim.prom. no.8:627-633 D '60. (MIRA 13:12)
(Terephthalic acid)

15.8113 2209

1/20/82

22737

S/191/61/000/006/002/005
B101/B215

AUTHORS: Korshak, V. V., Strepikheyev, Yu. A., Moiseyev, A. F.

TITLE: Synthesis of linear polyurethanes without solvents.
Communication I. Synthesis of linear polyurethanes in the melt

PERIODICAL: Plasticheskiye massy, no. 6, 1961, 10-11

TEXT: Results are reported according to which the synthesis of polyurethanes in the melt has considerable advantages over the synthesis in inert solvents. The reaction of 1,4-butanediol with hexamethylene diisocyanate was examined. Mixing of equimolar amounts of the two reagents causes the destruction of the polymer due to a great increase in temperature. In a nitrogen atmosphere, colorless polymers were obtained at 230°C with a molecular weight varying from 15,000 to 25,000. In a nitrogen atmosphere free from oxygen, hexamethylene diisocyanate was therefore added dropwise to butanediol heated at 80-90°C. After addition of 90% of the diisocyanate the strongly viscous mass was heated at 200-210°C for better stirring, and then, after adding the remaining diisocyanate, the above

Card 1/4 X

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B101/B215

Synthesis of linear polyurethanes . . .

temperature was maintained for 1.5-2.0 hr. The polymer obtained is easily soluble in tricresol. Addition of 1,4-butanediol to the heated hexamethylene diisocyanate yielded no linear polymers. An insoluble, rubber-like substance formed due to cross-linking. For the following reasons, this method is recommended for industrial application: (1) The reaction rate of resin formation is higher than in the presence of solvents; (2) the reaction can easily be regulated by varying the rate of diisocyanate addition; (3) polymers with the desired molecular weight can be obtained by varying the rate of diisocyanate addition and the intensity of mixing. There are 1 table and 14 references: 5 Soviet-bloc and 9 non-Soviet-bloc. The most important reference to English-language publications reads as follows: O' Bauer, Mod. Plastics, 24, no 10, 407, (1947). X

22737

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B101/B215

Synthesis of linear polyurethanes ...

Table. Results of the synthesis of polyurethanes without solvents.

Legend: 1) Addition of hexamethylene diisocyanate, g; 2) addition of 1,4-butanediol, g; 3) initial reaction temperature; 4) period of dropwise addition of diisocyanate, min; 5) final reaction temperature; 6) period of heating to 200°C, min; 7) intrinsic viscosity of a 0.5% solution in cresol; 8) molecular weight (determined from viscosity); 9) melting point.

Результаты синтеза п-

Навеска гексаметилендиизоцианата g)	Навеска 1,4- бутандиола g)	Начальная температура реакции °C	Продолжитель- ность приливания диизоцианата минуты
14,4896	7,5740	85	40
15,6671	8,1857	85	40
16,5632	8,6961	85	50
16,0500	8,4249	85	60
18,1256	9,1710	85	40

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22737

S/191/61/000/006/002/005
B101/B215

Synthesis of linear polyurethanes ...

олиуретанов без растворителя

Конечная температура реакции °C	Время выдержки при 200° минуты	Удельная вязкость 0,5%ного раствора в крезоле	Молекулярный вес по вязкости	Температура плавления °C
205	90	0,700	32750	178—182
205	120	0,723	33700	180—183
205	90	0,740	34500	179—182
205	120	0,766	35900	180—183
210	90	0,715	33160	178—183

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11.22/2
15.8140

AUTHORS:

TITLE:

PERIODICAL: Plastichekiye massy, no. 7, 1961, 13-16

TEXT: This report is a continuation of a study on the synthesis of polyurethanes without using solvents (Plast. massy, no. 6, 1961). The effect of the following factors upon the molecular weight was studied in the present paper: 1) presence of atmospheric oxygen; 2) ratio of the components; 3) addition of monofunctional reagents; 4) duration of heating. The synthesis of polyurethane was conducted by dropwise addition of hexamethyl diisocyanate to heated 1,4-butanediol. The temperature of the mass was not allowed to exceed a certain reaction temperature. The melt was kept at this temperature for a while, and, finally, the viscosity of a 0.5% solution in tricresol was determined. In calculating the molecular

24745
S/191/61/000/007/003/010
B101/B215

Korshak, V. V., Strepikheyev, Yu. A., Moiseyev, A. F.
Synthesis of linear polyurethanes without solvents. Some
rules governing the reaction of hexamethylene diisocyanate
with 1,4-butanediol in the melt

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S/191/61/000/007/003/010
B101/B215

X

Synthesis of linear polyurethanes...

weight, the Staudinger constant was set equal to $11 \cdot 10^{-4}$. 1) In the presence of oxygen, the molecular weight was considerably reduced. In nitrogen atmosphere, the molecular weight was only slightly reduced (from 36,000 to 33,000) by an increase of the initial temperature of the reaction from 80 to 180°C. In the presence of air, the molecular weight was 25,000 at 80°C and 14,000 at 180°C. An increase of the final reaction temperature from 190 to 230°C reduced the molecular weight in nitrogen atmosphere from 36,000 to 23,000 and in air from 24,000 to 8000. Under optimum reaction conditions (initial temperature: 80 to 90°C; final temperature: 200-210°C) the duration of dropwise addition of diisocyanate in nitrogen atmosphere did not affect the molecular weight. By dropwise addition of 20 min, a maximum molecular weight of 25,000 was obtained in the presence of air. Slower addition reduced the molecular weight. After 5 hr the molecular weight was unchanged by heating the polymer in N₂ up to 200°C. Heating up to 210°C led to a slight decrease. The presence of air reduces the molecular weight by 50 % within 2 hr at 190°C or within 1 hr at 200°C. 2) An excess of 1,4-butanediol caused the following changes in the molecular weight: 0.0 % excess: 35,400; 1.0 %: 28,050; 10 %: 5100;

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Synthesis of linear polyurethanes...

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100 %: 1850. The brittleness of the polymer was thus increased. With an excess of hexamethylene diisocyanate, three-dimensional networks formed and the polymer became insoluble. Excess of 1 %: molecular weight of 33,400; the polymer is meltable and filamentous. With 10 %: molecular weight of 2741; the polymer is infusible and rubber-like. 3) Heptyl alcohol or piperidine were added as monofunctional reagents. Molecular weight with additions of heptyl alcohol: 1 %: 24,360; 2 %: 14,200; 10 %: 4680; 40 %: 1850. The action of piperidine was the same. 4) In nitrogen atmosphere, the molecular weight was further increased by adding the total amount of diisocyanate. At 200°C the molecular weight increased rapidly during the first 1-1.5 hr and reached its maximum after 2.5 hr (36.000). V. V. Golubev and S. R. Rafikov are mentioned. There are 8 figures, 4 tables, and 3 Soviet-bloc references.

Card 3/3

15.8140

AUTHORS

TITLE:

PERIODICAL:

Korshak, V. V., Strepikheyev, Yu. A., Moiseyev, A. F.
26992 S/191/61/000/009/002/007
B110/B218

Production of linear polyurethanes without solvents. Some
physicomechanical indices of polyurethanes based on hexa-
methylene diisocyanate and a number of glycols

Plasticheskiye massy, no. 9, 1961, 16 - 20

TEXT: The authors studied the change in physicomechanical properties of polyurethanes (PU) obtained on the basis of hexamethylene diisocyanate and some glycols. The PU were produced by adding the stoichiometric amount of diisocyanate to the heated diol. The method was developed by the authors (Plast. Massy, No. 6, 1961, ibid., No. 7, 1961). The authors determined melting point, molecular weight (viscosimetrically), and other physicomechanical indices. In PU on the basis of diols with different numbers of C atoms, the maximum melting point lies at 183°C for 1,4-butanediol PU. Melting points of PU on the basis of glycols with odd numbers of C atoms are slightly higher than with even numbers of C atoms. PU on the basis of ethylene glycol, 1,4-butanediol, 1,6-hexanediol, and 1,10-decanediol are transparent or white, solid, horny substances which yield cold-drawing

end . / 5

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B110/B218

Production of linear polyurethanes...

threads in melting. They are soluble in tricresol or in a phenol-water mixture (90 : 10). PU based on diethylene glycol and 1,6-methylhexanediol are transparent colorless elastic substances; they are soluble in tricresol, in phenol-water mixtures (90 : 10), and also in alcohol-chloroform mixtures (50 : 50). From the solutions, they form elastic films of high mechanical strength. Transparent, brittle products are obtained on the basis of glycols with a secondary hydroxy group such as 1,2-propanediol and 1,3-butanediol. PU hardness drops with rising molecular weight of diol. PU on the basis of diethylene glycol (DE) have low strength and thermal stability, high water-absorbing capacity, and a large tangent of the angle of dielectric losses. The authors found: The presence of a methyl side group or of ether oxygen in the glycol component reduces the melting temperature, hardness, thermal stability, and other physicomechanical indices. Elasticity and solubility in organics increase. PU on the basis of an ethylene-glycol (EG) - DE mixture are white, elastic, soluble in cresol, $C_2H_5OH - CHCl_3$ mixtures (50 : 50), and $C_2H_5OH - C_2H_4Cl_2$ mixtures. From melts, PU with high EG content produce strong threads and poorly elastic films, PU with high DE content, weak threads and solid elastic

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Production of linear polyurethanes...

films. Melting point, thermal stability, Brinell hardness first drop with increasing EG content of the mixture, start rising at 35-40% of EG and reach a maximum at 100% of EG. The water-absorbing capacity drops to 0.23% with 100% of EG. PU on the basis of an EG - 1,4-butanediol (BD) mixture are white, horny, but less solid, soluble only in cresol and a phenol-water mixture (90 : 10). In melting, they yield strong threads and elastic films. Melting temperatures, thermal stabilities, and impact strengths are lower in glycol mixtures than in individual diols, the water-absorbing capacity is slightly higher. PU on the basis of DE - 1,4-BD mixtures are transparent, elastic, and soluble in cresol only. The elasticity of threads and films from the melts decreases with increasing 1,4-BD content while the strength increases. PU on the basis of triethylene glycol - 1,4-BD mixtures are more elastic, and soluble in $C_2H_5OH-CHCl_3$ and $C_2H_5OH-C_2H_4Cl_2$. In the same solvents, also PU based on methylhexanediol- 1,4-BD mixtures are soluble. These PU are white or transparent elastic products. From the melt, they produce very strong threads and solid films. The impact-strength curve according to Dinstat of the DE - 1,4-BD mixture passes a minimum with increasing DE content, and reaches a maximum at about 75% of DE. The physicomechanical properties of PU are strongly and in a complicated manner

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26992

Production of linear polyurethanes...

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X

affected by the diol ratio. There are 7 figures, 3 tables, and 5 references. 2 Soviet and 3 non-Soviet. The two references to English-language publications read as follows: Ref. 1: O. Bayer, Mod Plastics, 24, 149 (1947); Ref. 5: R. Hill, E. Walker, J. Polymer Sci., 3, 609 (1948).

Table 3. Physicomechanical properties of PU obtained from hexamethylene diisocyanate and glycol mixtures. Legend: (1) glycol, (2) glycol ratio, moles, (3) impact strength according to Dinstat, kg·cm/cm², (4) static bending according to Dinstat, kg·cm/cm², (5) Brinell hardness, kg/mm², (6) water absorption, %, (7) thermal stability according to Vicat, °C, (8) melting temperature, °C, (9) ethylene glycol, diethylene glycol, (10) ethylene glycol, 1,4-butanediol, (11) diethylene glycol, 1,4-butanediol, (12) triethylene glycol, 1,4-butanediol, (13) 1,6-methyl hexanediol, 1,4-butanediol.

Card 4/5

STREPIKHEYEV, Yu.A.; BARANOV, Yu.I.; BURMISTROVA, O.A.

Determination of the heats of combustion and heat capacities
of some mono- and diisocyanates. Izv.vys.ucheb.zav.;khim.i
khim.tekh. 5 no.3:387-390 '62. (MIRA 15:7)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
Mendeleyeva, kafedra fizicheskoy khimii.
(Isocyanates--Thermal properties)

STREPIKHEYEV, Yu.A.; PETRUNIN, V.A.

Synthesis of α,α,α -trichloroalkyl- ω -isocyanates and
 α,α -dichloroalkenyl- ω -isocyanates. Zhur. VKHO 7
no. 6:702-703 '62. (MIRA 15:12)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
D.I. Mendeleyeva. (Isocyanic acid)

STREPIKHEYEV, Yu.A.; KARETNIKOV, G.S.; BARANOV, Yu.I.

Use of the ITR-1 interferometer for determining the hydrochloric
acid content of phosgene. Zav.lat. 28 no.3:314-315 '62
(MIRA 15:4)

(Phosgene) (Hydrochloric acid) (Interferometry)

STREPIKHEYEV, Yu.A.; BABKIN, B.M.

Solubility of hydrogen chloride in chlorobenzene. Khim.prom.
no.1:38-39 Ja '63. (MIRA 16:3)
(Hydrochloric acid) (Benzene)

KASTERINA, Tat'yana Nikolayevna; KALININA, Lidiya Sergeyevna;
STREPIKHEYEV, Yu.A., red.; LYANDE, Yu.V., red.; KOGAN, V.V.,
tekhn. red.; PANTELEYEVA, L.A., tekhn. red.

[Chemical methods of studying synthetic resins and plastics]
Khimicheskie metody issledovaniia sinteticheskikh smol i
plasticheskikh mass. Pod red. IU.A.Strepikheeva. Moskva,
Goskhimizdat, 1963. 284 p. (MIRA 16:7)

(Resins, Synthetic--Analysis)
(Plastics--Analysis)

STREPIKHEYEV, Yu.A.; ZALIKIN, A.A.; CHIMISHKYAN, A.L.

Determination of primary, secondary, and tertiary amino groups
in polynuclear polyamines. Zhur.anal.khim. 18 no.10:1262-1265
O '63. (MIRA 16:12)

1. Mendeleev Moscow Chemico-Technological Institute.

ZALIKIN, A.A.; KOCHETKOV, V.L.; STREPIKHHEYEV, Yu.A.

Some physical and physicochemical constants of m- and
p-chloraniline and m- and p-chlorophenylisocyanates.
Khim. prom. 41 no.5:338 My '65.

(MIRA 18:6)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
Mendeleyeva.

STRELENIYEV, Yu.A.; SOKOLOV, V.P.; VASIL'YEV, V.V.

Analysis of chlorophyll derivatives by liquid chromatography.
Zhur. anal. Khim. 30(1975) No. 10, p. 2161-2167.

1. Moskovskiy khimiko-tehnicheskiy in-t im. M.V. Lomonosova.

L 37218-66 EWP(j)/EWT(m)/T/EWP(v) IJP(c) RM/WW/JWT

ACC NR: AP6018128 (A) SOURCE CODE: UR/0191/66/000/006/0046/0048

AUTHOR: Zalikin, A. A.; Davydov, A. B.; Strepikheyev, Yu. A.; Ivanova, Z.G.

ORG: none

TITLE: Use of polycyclic polyisocyanates as components in cold curing adhesive compositions

SOURCE: Plasticheskiye massy, no. 6, 1966, 46-48

TOPIC TAGS: isocyanate resin, polyester plastic, adhesive, adhesion, heat resistance

ABSTRACT: The possibility of using polycyclic polyisocyanates (A) in adhesives that will cure without heat to attain improved heat stability was investigated. A, made of aniline, o-toluidine, or o-chloroaniline with formaldehyde, were used as 50% acetone or toluylene diisocyanate solutions. To prepare the adhesive various polyesters were added, also as 50% acetone solutions or as powders. The components were mixed, catalyzed with a 5% aqueous potassium methacrylate solution, mixed again and spread onto steel or duralumin surfaces 30-40 minutes later. Bond strength and heat stability depended on the composition of the polyisocyanate, increasing with increase in its molecular weight and

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UDC: 678.664.668.395.6

L 37218-66

ACC NR: AP6018128

number of NCO- groups. Physical mechanical properties of the adhesive and its bond strength at room temperature and at 150-200°C also improved with increase in curing time. With cementing temperatures of 60-120°C the same bond strength was attained in 2 hours as when curing at room temperature for 10 hours. Bond strength also depended on surface preparation--best adhesion was obtained with freshly sandblasted surfaces. Orig. art. has: 6 tables.

SUB CODE: 07,11/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 009

ms
Card 2/2

ACC NR: AP6009027

(A)

SOURCE CODE: UR/0064/65/000/011/0017/0020

AUTHOR: Zalikin, A. A.; Strepikheyev, Yu. A.

ORG: none

TITLE: Synthesis and properties of the polynuclear polyisocyanates

SOURCE: Khimicheskaya promyshlennost', no. 11, 1965, 17-20

TOPIC TAGS: polymer, synthetic material, polyamine compound, isocyanate resin, polyurethane, IR spectrum

ABSTRACT: Several polynuclear polyisocyanates with molecular weights of 280-500, 21.6-33.6% NCO-groups, and 1.3-11.2% hydrolyzable chlorine were synthesized via a two-stage phosgenation of various mixtures of polymethylenepolyphenylenepolyamines in chlorobenzene. The temperature in the first stage was 100°C and its duration was 75 min. The temperature in the second stage was 120°C and its duration was 75 min. The yields of the polynuclear polyisocyanates were within the 92-97% range. The starting polyamines, with 158-400 molecular weight and 6.9-14.8% NH₂-group content, were synthesized from aniline, ortho- and para toluidine, o-chloroaniline, formaldehyde, benzaldehyde, and acetaldehyde. It was found that the molecular weight and the chlorine content in polyisocyanates depended upon the molecular weight and the structure of the starting polyamines. The presence of such groups as COCl, C=O, and C-Cl in the poly-

UDC: 678.661.01

Card 1/2

ACC NR: AP6009027

isocyanate products were determined by the IR technique. Orig. art. has: 4 figures,
4 tables.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 004

Card 2/2

STEPKIN, S.A.

Stability of a thin-wall cylinder compressed by a flexible
stressed binding. Sbor. trud. LIIZHT no.229:139-146 '64.
(MIRA 18:8)

